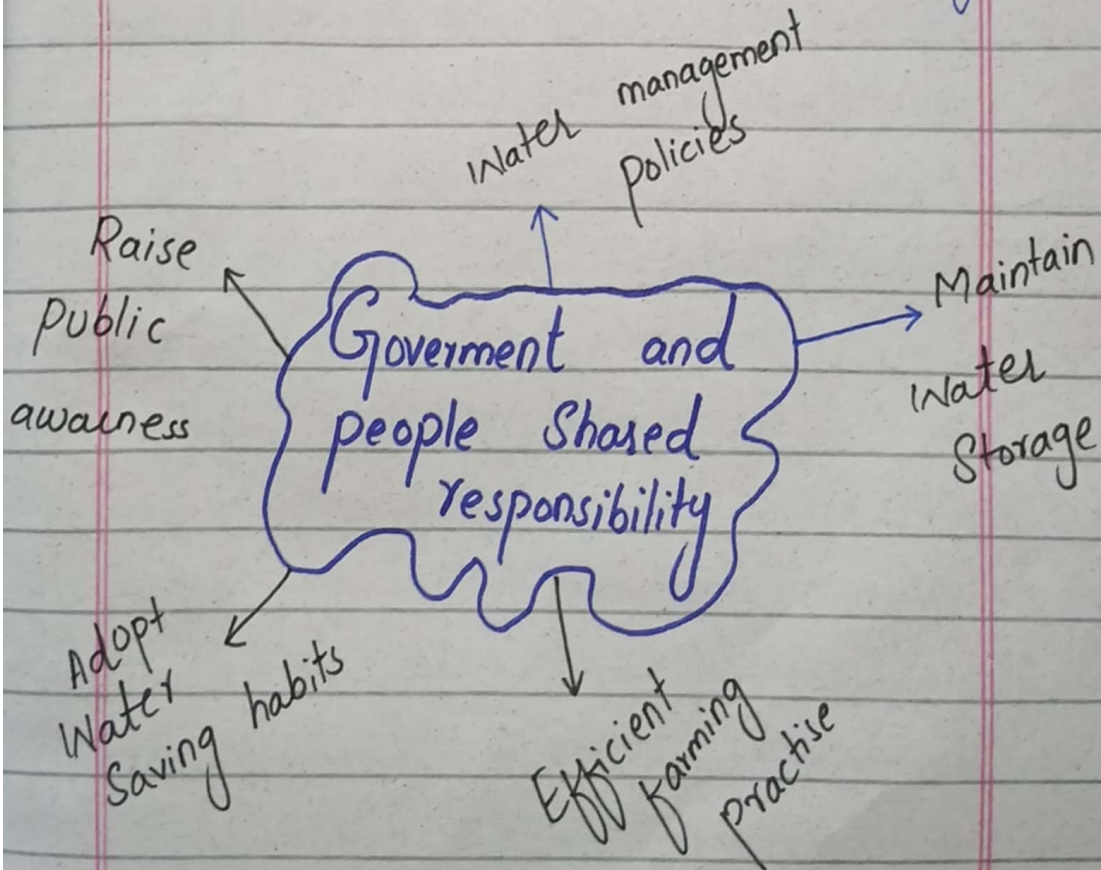
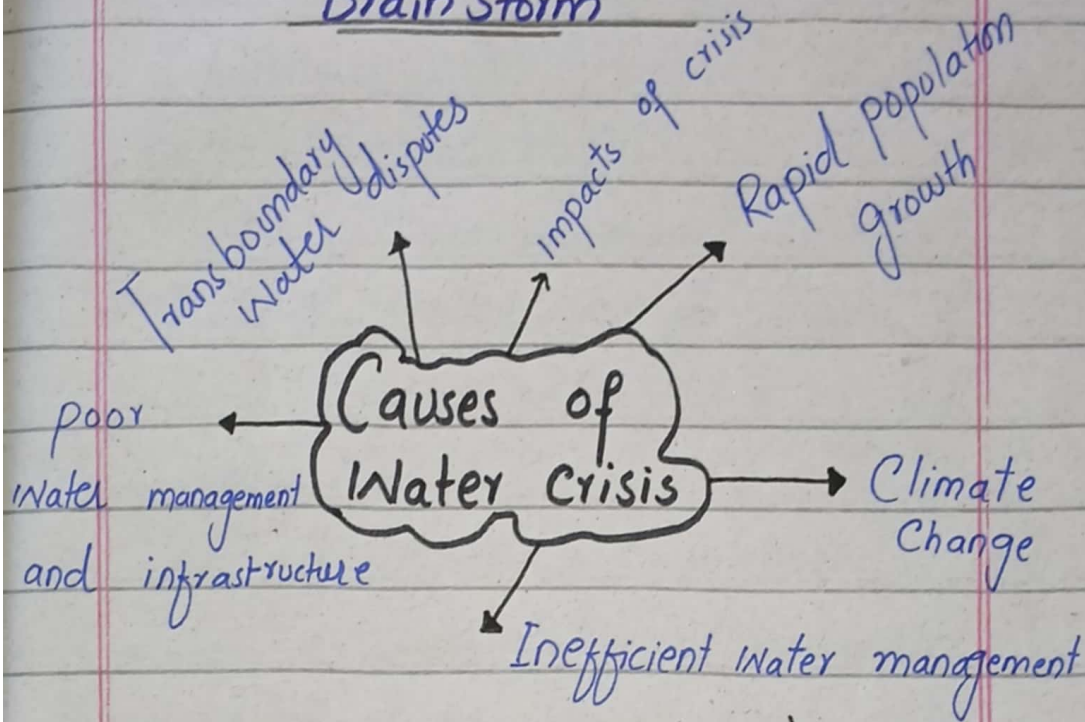


Water crisis in Pakistan:

A shared responsibility of
the government and people.

Brain Storm



Outlines :

- 1 Introduction.
- 2 Main body.
 - A Causes of Water crisis in Pakistan.
 - 2.1 Rapid population growth.
 - 2.1.1 Increased demand for water.
 - 2.1.2 Decline in per capita water availability.
 - 2.2 Climate change.
 - 2.2.1 unpredictable weather patterns
 - 2.2.2 Glacial melt and extreme events (e.g 2022 floods)
 - 2.3 Inefficient Water management.
 - 2.3.1 Outdated irrigation techniques
 - 2.3.2 Minimal waste water treatment
 - 2.4 Transboundary water disputes.
 - 2.4.1 Indus water treaty tensions with india
 - 2.4.2 Geopolitical implications

B Impacts of crisis

2.1 Agricultural decline

2.1.1 Dependency on irrigation

2.1.2 Threat to food security

2.2 Health issues:

2.2.1 Raise in water borne disease

2.2.2 Dehydration

2.2.3 Malnutrition

2.3 Government's Responsibilities:

2.3.1 Develop and maintain water storage systems (dams, reservoirs)

2.3.2 Implement water management policies (e.g. National water policy)

2.3.3 promote efficient irrigation methods in agriculture

2.3.4 Raise public awareness through Campaign

2.3.5 Enforce laws against water theft and pollution

2.4 People Responsibilities:

2.4.1 Adopt water saving habits at home and workplace.

2.4.2 Use efficient farming practices (drip irrigation, crop selection)

2.4.3 Avoid storage wastage and report leaks or illegal connections.

2.4.4 Participate in awareness programs and educate others.

2.4.5 Support government initiatives and follow regulations

2.5 Importance of Shared responsibilities:

2.5.1 Neither government nor people can solve the crisis alone

2.5.2 Collaboration ensures sustainable and long term impact.

2.5.3 Builds a culture of conservation and accountability.

3 Conclusion.

The Essay:

Pakistan is grappling with a severe water crisis that threatens its agricultural economy, public health and regional stability. Despite being home to the world's largest contiguous irrigation system, the country faces dwindling water resources due to combination of climatic, political and infrastructural challenges. Since its independence, Pakistan population has surged, leading to increased water demand. Per capita water availability has plummeted from 5,600 cubic meters in 1947 to approximately 1,017 cubic meters in recent years, edging closer to the threshold of absolute water scarcity. The country is experiencing erratic weather patterns, including reduced rainfall and accelerated glacial melt. The 2022 floods, exacerbated

by climate change, affecting 33 million people and causing damages. out-dated irrigation methods and lack of waste water treatment contribute to water wastage. Pakistan treats only 1% of its collected wastewater ranking among the lowest globally. Tensions with India over the Indus waters treaty have intensified, especially after India's recent suspension of the treaty following a militant attack in Kashmir. This move threatens Pakistan's access to crucial water resources for agriculture and hydropower. Water scarcity jeopardizes crop yields, leading to food insecurity and economic instability. The lack of adequate sanitation and waste water treatment exacerbates public health challenges. Reduced water flow affects electricity generation, leading to power

outages and hindering industrial activities. The government has a pivotal role to play in mitigating the water crisis.

Investing in new reservoirs, improving canal systems, and promoting water conservation technologies are essential steps.

launching public awareness campaigns can lead to more efficient water

use. legislation such as the National water policy must be implemented

Sincerely, with coordination efforts between federal and provincial authorities to manage resources

effectively. While government initiatives are crucial

individual and community actions are equally important.

people must adopt water saving habits at home,

avoid wasteful practices, and report water theft

or leaks. Farmers, in particular, need to shift to water-efficient techniques like drip irrigation and crop rotation. Educating communities about the importance of water conservation through schools, social media, and local organizations can create a culture of responsibility and sustainability. Pakistan is facing an alarming water crisis that threatens its agriculture, economy and public health. With one of the highest rates of water consumption in the world and rapidly depleting freshwater resources, the country is approaching the threshold of absolute water scarcity. Addressing this crisis is not solely the responsibility of the government,

rather, it requires a collective effort from both state institutions and people.

The government plays a role in managing water resources. Unfortunately, Pakistan lacks a coherent and updated water management policy.

The infrastructure for water management policy for water storage, such as dams and reservoirs, is insufficient. Irrigation methods waste a significant amount of water in the agricultural sector, which consumes over 90%

of the country's available water. The absence of modern water conservation techniques, coupled with political inaction, has further worsened the

Situation . Pakistan has not invested adequately in water storage infrastructure . The country stores less than 10% of its annual rivers flows , compared to 40% in other arid countries .

Around 90% of Pakistan's water is used for agricultural but much of it is wasted due to outdated and leaky irrigation canal and flood irrigation method . political disputes and delays have stalled crucial dam projects (e.g. Kalabagh dam) which could help with water storage and flood control . Government policies often prioritize short term political gains over long term sustainability and climate adaption receive

little attention . poor urban
planning has overwhelmed
municipal water systems,
resulting in water theft,
unregulated bore wells and
supply shortages. Government
should promote nation
wide awareness campaigns
and encourage water saving
technologies in agriculture
and industry. Government
should invest in dams,
reservoirs canals and
modern irrigation systems
to store and distribute
water efficiently. Government
enforce laws against dumping
industrial waste and
untreated sewage into
rivers and canals. Government
should introduce and
subsidize modern irrigation
methods like drip or

Sprinkler system. Government must create clear water management policies, ensure their implementation and hold violators accountable.

The government is responsible for creating and enacting laws to prevent water theft. In Pakistan, for example laws like the water apportionment accord and regulations under the Indus river system authority aim to control illegal diversion of water from canals rivers and others. The government must pass and enforce the law to control the pollution of water bodies. These law include rules for water disposal industrial effulents, and

agricultural runoff. In Pakistan, environmental protection act

provides a framework to prevent and address water pollution caused by industrial, agricultural and domestic activities.

The government is tasked with setting up agencies systems to monitor water sources. This includes detecting illegal water with drawls and checking pollution levels. To deter water theft, the government enforces penalties for those caught stealing water. This may include fines, imprisonment or both. The government partners with local authorities, law enforcement and NGOs

to monitor water sources
and ensure that laws are
followed at the grassroots
level. people must fix leaks
and avoid wasting in
daily activities like washing,
bathing and gardening.
promote awareness in
communities, especially in
rural areas, about
sustainable water use. educate
other about importance of
water. people do not
throw garbage, chemicals or
sewage into rivers, canals
or lakes. Use eco-friendly
products to reduce water
contamination. Collect and
store rain water for use
in homes and agriculture.
Support community level
initiatives for rainwater
collection. participate in

water related public discussion
and initiatives.